10519835.trn

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PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	JAN 08	CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS 3	JAN 16	CA/CAplus Company Name Thesaurus enhanced and reloaded
NEWS 4	JAN 16	IPC version 2007.01 thesaurus available on STN
NEWS 5	JAN 16	WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
NEWS 6	JAN 22	CA/CAplus updated with revised CAS roles
NEWS 7	JAN 22	CA/CAplus enhanced with patent applications from India
NEWS 8	JAN 29	PHAR reloaded with new search and display fields
NEWS 9	JAN 29	CAS Registry Number crossover limit increased to 300,000 in multiple databases
NEWS 10	FEB 15	PATDPASPC enhanced with Drug Approval numbers
NEWS 11	FEB 15	RUSSIAPAT enhanced with pre-1994 records
NEWS 12	FEB 23	KOREAPAT enhanced with IPC 8 features and functionality
NEWS 13	FEB 26	MEDLINE reloaded with enhancements
NEWS 14	FEB 26	EMBASE enhanced with Clinical Trial Number field
NEWS 15	FEB 26	TOXCENTER enhanced with reloaded MEDLINE
NEWS 16	FEB 26	IFICDB/IFIPAT/IFIUDB reloaded with enhancements
NEWS 17	FEB 26	CAS Registry Number crossover limit increased from 10,000 to 300,000 in multiple databases
NEWS 18	MAR 15	WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS 19	MAR 16	CASREACT coverage extended
NEWS 20	MAR 20	MARPAT now updated daily
NEWS 21	MAR 22	LWPI reloaded
NEWS 22	MAR 30	RDISCLOSURE reloaded with enhancements
NEWS 23	APR 02	JICST-EPLUS removed from database clusters and STN
NEWS 24	APR 30	GENBANK reloaded and enhanced with Genome Project ID field
NEWS 25	APR 30	CHEMCATS enhanced with 1.2 million new records
NEWS 26	APR 30	CA/CAplus enhanced with 1870-1889 U.S. patent records
NEWS 27	APR 30	INPADOC replaced by INPADOCDB on STN
NEWS 28	MAY 01	New CAS web site launched
NEWS 29	MAY 08	CA/CAplus Indian patent publication number format defined
NEWS 30	MAY 14	RDISCLOSURE on STN Easy enhanced with new search and display fields
NEWS EXPRESS		NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
NEWS HOURS		STN Operating Hours Plus Help Desk Availability
NEWS LOGIN		Welcome Banner and News Items
NEWS IPC8		For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 10:58:33 ON 18 MAY 2007

=>
Uploading
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Do you want to switch to the Registry File?
Choice (Y/n):
Switching to the Registry File...
Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 10:58:47 ON 18 MAY 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9
DICTIONARY FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

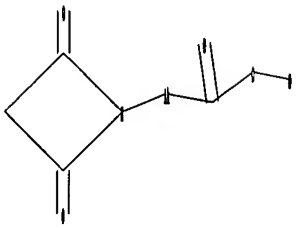
TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

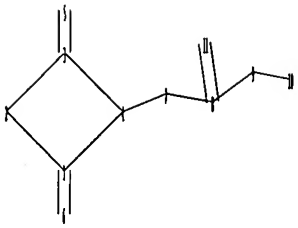
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\10519835.str



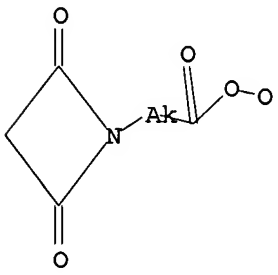


chain nodes :
5 6 7 8 9 10 11
ring nodes :
1 2 3 4
chain bonds :
1-6 3-5 4-7 7-8 8-9 8-11 9-10
ring bonds :
1-2 1-4 2-3 3-4
exact/norm bonds :
1-2 1-4 1-6 2-3 3-4 3-5 4-7 7-8 8-9 8-11
exact bonds :
9-10
isolated ring systems :
containing 1 :

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR

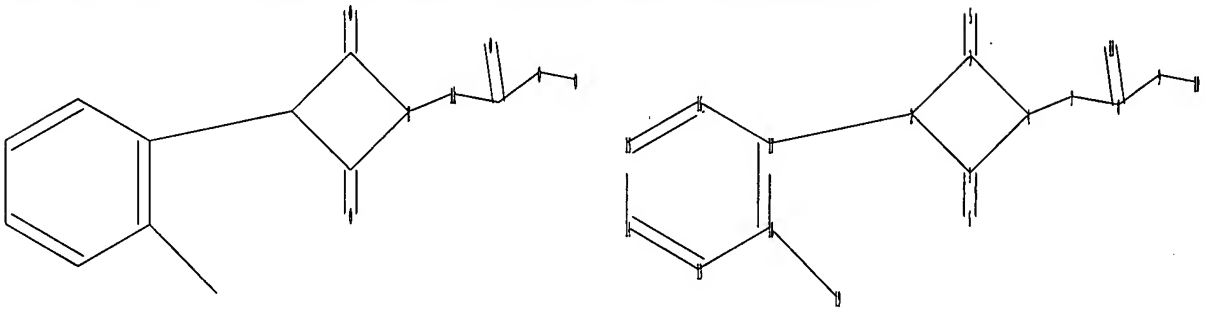


Structure attributes must be viewed using STN Express query preparation.

=> s l1
SAMPLE SEARCH INITIATED 10:59:11 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

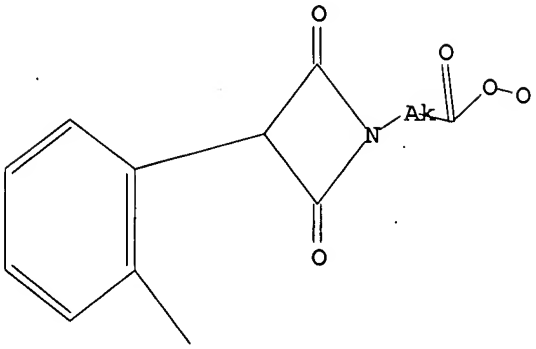
100.0% PROCESSED 0 ITERATIONS 0 ANSWERS

```
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE   **COMPLETE**
                        BATCH    **COMPLETE**
PROJECTED ITERATIONS:             0 TO         0
PROJECTED ANSWERS:                0 TO         0

L2             0 SEA SSS SAM L1

=> s l1 sss full
FULL SEARCH INITIATED 10:59:18 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -        1 TO ITERATE

100.0% PROCESSED         1 ITERATIONS                          0 ANSWERS
SEARCH TIME: 00.00.01

L3             0 SEA SSS FUL L1

=>
Uploading C:\Program Files\Stnexp\Queries\10519835a.str
```



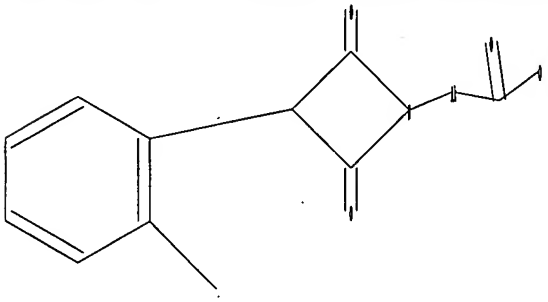
```
chain nodes :
5  6  7  8  9  10  11  19
ring nodes :
1  2  3  4  13  14  15  16  17  18
chain bonds :
1-6  2-17  3-5  4-7  7-8  8-9  8-11  9-10  18-19
ring bonds :
1-2  1-4  2-3  3-4  13-14  13-18  14-15  15-16  16-17  17-18
exact/norm bonds :
1-2  1-4  1-6  2-3  3-4  3-5  4-7  7-8  8-9  8-11
exact bonds :
2-17  9-10  18-19
normalized bonds :
13-14  13-18  14-15  15-16  16-17  17-18
isolated ring systems :
containing 1 :


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:CLASS  6:CLASS  7:CLASS  8:CLASS  9:CLASS
10:CLASS  11:CLASS  13:Atom  14:Atom  15:Atom  16:Atom  17:Atom  18:Atom  19:CLASS



L4      STRUCTURE UPLOADED

=> d l4
```

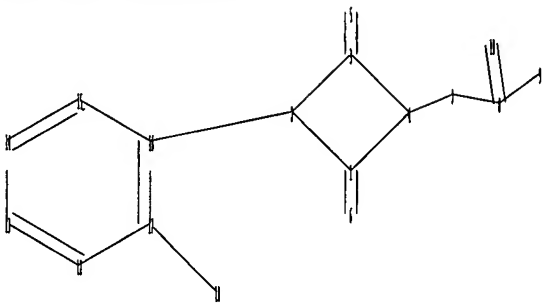
L4 HAS NO ANSWERS
L4 STR



Structure attributes must be viewed using STN Express query preparation.

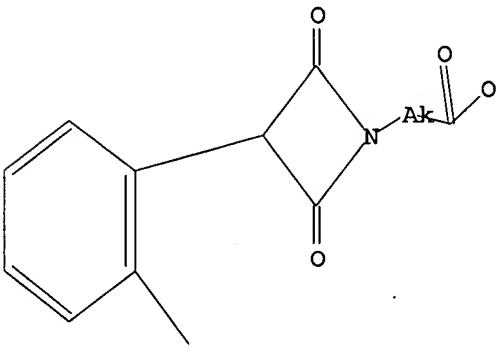
```
=> s l4
SAMPLE SEARCH INITIATED 11:02:05 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -        1 TO ITERATE

100.0% PROCESSED         1 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:            1 TO       80
PROJECTED ANSWERS:               0 TO        0

L5             0 SEA SSS SAM L4

=> s l4 sss full
FULL SEARCH INITIATED 11:02:11 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -        5 TO ITERATE

100.0% PROCESSED         5 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.01

L6             0 SEA SSS FUL L4

=>
Uploading C:\Program Files\Stnexp\Queries\10519835b.str
```





```
chain nodes :
5  6  7  8  9  10  18
ring nodes :
```

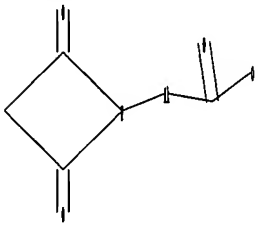
```
1  2  3  4  12  13  14  15  16  17
chain bonds :
1-6  2-16  3-5  4-7  7-8  8-9  8-10  17-18
ring bonds :
1-2  1-4  2-3  3-4  12-13  12-17  13-14  14-15  15-16  16-17
exact/norm bonds :
1-2  1-4  1-6  2-3  3-4  3-5  4-7  7-8  8-9  8-10
exact bonds :
2-16  17-18
normalized bonds :
12-13  12-17  13-14  14-15  15-16  16-17
isolated ring systems :
containing 1 :


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:CLASS  6:CLASS  7:CLASS  8:CLASS  9:CLASS
10:CLASS  12:Atom  13:Atom  14:Atom  15:Atom  16:Atom  17:Atom  18:CLASS



L7      STRUCTURE UPLOADED

=> d l7
L7 HAS NO ANSWERS
L7             STR
```

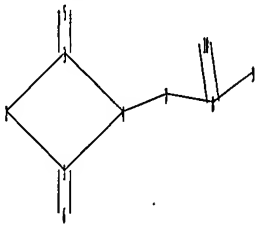



```
Structure attributes must be viewed using STN Express query preparation.


=> s l7
SAMPLE SEARCH INITIATED 11:03:26 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -       29 TO ITERATE

100.0% PROCESSED       29 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:          257 TO      903
PROJECTED ANSWERS:               0 TO        0

L8             0 SEA SSS SAM L7
```

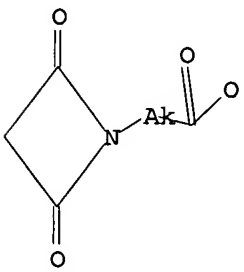
10519835.trn

```
=> s l7 sss full
FULL SEARCH INITIATED 11:03:34 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      637 TO ITERATE

100.0% PROCESSED      637 ITERATIONS                          0 ANSWERS
SEARCH TIME: 00.00.01

L9             0 SEA SSS FUL L7

=>
Uploading C:\Program Files\Stnexp\Queries\10519835c.str
```





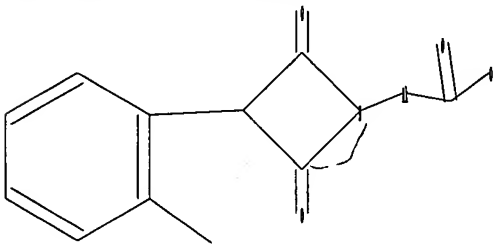
```
chain nodes :
5  6  7  8  9  10
ring nodes :
1  2  3  4
chain bonds :
1-6  3-5  4-7  7-8  8-9  8-10
ring bonds :
1-2  1-4  2-3  3-4
exact/norm bonds :
1-2  1-4  1-6  2-3  3-4  3-5  4-7  7-8  8-9  8-10
isolated ring systems :
containing 1 :


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:CLASS  6:CLASS  7:CLASS  8:CLASS  9:CLASS
10:CLASS



L10      STRUCTURE UPLOADED

=> d l10
L10 HAS NO ANSWERS
L10              STR
```

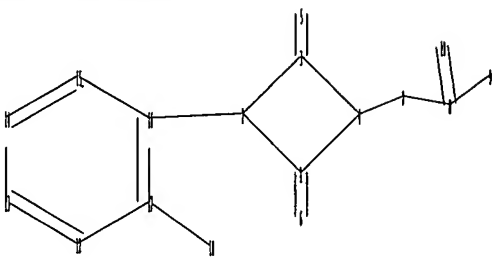


10519835.trn

Structure attributes must be viewed using STN Express query preparation.

```
=> s l10
SAMPLE SEARCH INITIATED 11:05:17 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      351 TO ITERATE

100.0% PROCESSED      351 ITERATIONS                                  0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:          5896 TO     8144
PROJECTED ANSWERS:                0 TO        0

L11           0 SEA SSS SAM L10

=> s l10 sss full
FULL SEARCH INITIATED 11:05:24 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -     6664 TO ITERATE

100.0% PROCESSED     6664 ITERATIONS                                 11 ANSWERS
SEARCH TIME: 00.00.01

L12          11 SEA SSS FUL L10

=>
Uploading C:\Program Files\Stnexp\Queries\10519835d.str
```

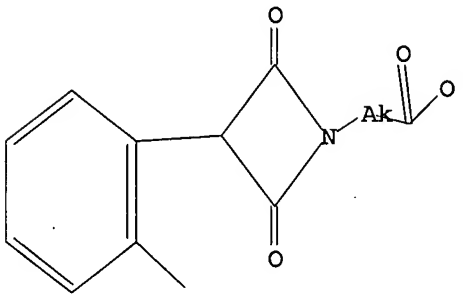




```
chain nodes :
5  6  7  8  9  10  18
ring nodes :
1  2  3  4  12  13  14  15  16  17
chain bonds :
1-6  2-16  3-5  4-7  7-8  8-9  8-10  17-18
ring bonds :
1-2  1-4  2-3  3-4  12-13  12-17  13-14  14-15  15-16  16-17
exact/norm bonds :
1-2  1-4  1-6  2-3  3-4  3-5  4-7  7-8  8-9  8-10
exact bonds :
2-16  17-18
normalized bonds :
12-13  12-17  13-14  14-15  15-16  16-17
isolated ring systems :
containing 1 : 12 :


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:CLASS  6:CLASS  7:CLASS  8:CLASS  9:CLASS
10:CLASS  12:Atom  13:Atom  14:Atom  15:Atom  16:Atom  17:Atom  18:CLASS
```

L13 STRUCTURE UPLOADED

=> d l13
L13 HAS NO ANSWERS
L13 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l13
SAMPLE SEARCH INITIATED 11:07:11 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 4 TO ITERATE

100.0% PROCESSED 4 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 4 TO 200
PROJECTED ANSWERS: 0 TO 0

L14 0 SEA SSS SAM L13

=> s l13 sss full
FULL SEARCH INITIATED 11:07:19 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 83 TO ITERATE

100.0% PROCESSED 83 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

L15 0 SEA SSS FUL L13

=> d his

(FILE 'HOME' ENTERED AT 10:58:33 ON 18 MAY 2007)

FILE 'REGISTRY' ENTERED AT 10:58:47 ON 18 MAY 2007
L1 STRUCTURE UPLOADED
L2 0 S L1
L3 0 S L1 SSS FULL
L4 STRUCTURE UPLOADED
L5 0 S L4

```
L6             0 S L4 SSS FULL
L7               STRUCTURE UPLOADED
L8             0 S L7
L9             0 S L7 SSS FULL
L10              STRUCTURE UPLOADED
L11            0 S L10
L12           11 S L10 SSS FULL
L13              STRUCTURE UPLOADED
L14            0 S L13
L15            0 S L13 SSS FULL

=> FIL HCAPLUS
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   865.00     865.21

FILE 'HCAPLUS' ENTERED AT 11:07:56 ON 18 MAY 2007
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FILE COVERS 1907 - 18 May 2007  VOL 146 ISS 22
FILE LAST UPDATED: 15 May 2007  (20070515/ED)

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 This file contains CAS Registry Numbers for easy and accurate

=> s l12
L16            7 L12

=> d l16 ibib abs hitstr tot

L16  ANSWER 1 OF 7  HCAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         1992:469674  HCAPLUS
DOCUMENT NUMBER:          117:69674
TITLE:                    A facile synthesis of azetidine-2,4-diones
AUTHOR(S):                Bari, S. S.; Trehan, I. R.; Sharma, A. K.; Manhas, M.
                          S.
CORPORATE SOURCE:         Dep. Chem., Panjab Univ., Chandigarh, India
SOURCE:                   Synthesis (1992), (5), 439-42
                          CODEN: SYNTBF; ISSN: 0039-7881
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
OTHER SOURCE(S):          CASREACT 117:69674
GI
```
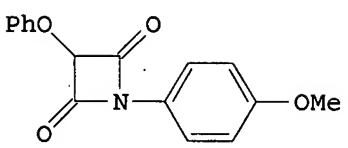
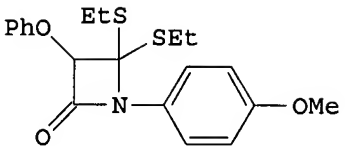



I



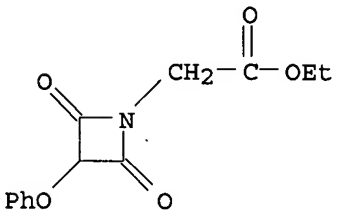
II

AB Azetidine-2,4-diones, e.g. I, can be conveniently synthesized by mild oxidative hydrolysis of 4,4-bis(alkylthio)azetidin-2-ones, e.g. II, using N-bromosuccinimide.

IT 142389-08-0P 142389-09-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

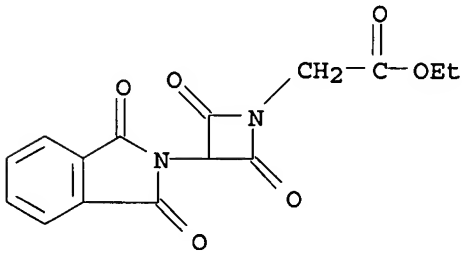
RN 142389-08-0 HCAPLUS

CN 1-Azetidineacetic acid, 2,4-dioxo-3-phenoxy-, ethyl ester (9CI) (CA INDEX NAME)



RN 142389-09-1 HCAPLUS

CN 1-Azetidineacetic acid, 3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



L16 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:407106 HCAPLUS

DOCUMENT NUMBER: 111:7106

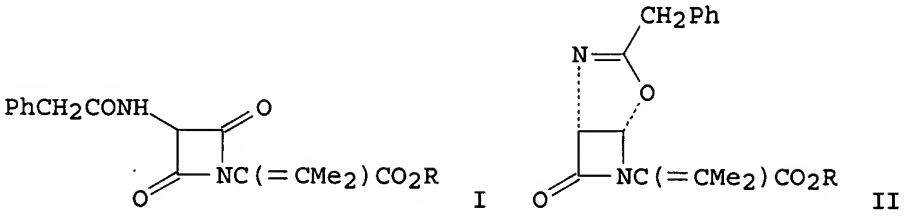
TITLE: Studies related to penicillins. Part 26. Conversion of potassium benzylpenicillinate into 1-substituted derivatives of 3-phenylacetamidoazetidine-2,4-dione

AUTHOR(S): Kaura, Arun C.; Stoodley, Richard J.

CORPORATE SOURCE: Dep. Org. Chem., Univ. Newcastle upon Tyne, Newcastle upon Tyne, NE1 7RU, UK

SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1988), (10), 2813-20
CODEN: JCPRB4; ISSN: 0300-922X

DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 111:7106
GI



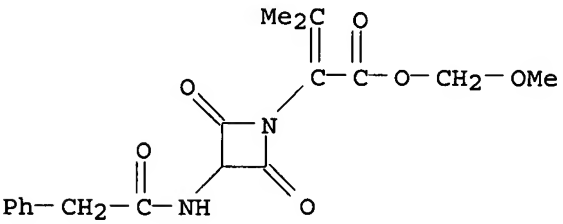
I II

AB A new method for the synthesis of azetidine-2,4-diones, involving a Norrish Type II photoreaction of 4-pyruvoylazetidin-2-ones, has been devised. The process features in two strategies in which potassium benzylpenicillinate is converted into azetidine-2,4-diones I (R = Me, CH2C6H4NO2-4, CHCOMe). In one strategy, oxadiazabicyclo[3.2.0]heptenones II were treated with pyruvic acid to give the (3R,4R)-3-phenylacetamido-4-pyruvoyloxyazetidin-2-ones (III), photolysis converted III into I. II were derived from (2R,3S)-4-oxo-3-phenylacetamidoazetidine-2-sulfinic acids by a novel oxidative desulfinylation induced by Pb(OAc)4. In the second strategy, (1S,5R)-analogs of II were treated with pyruvic acid to give (3S,4S)-3-phenylacetamido-4-pyruvoyloxyazetidin-2-ones. Photolysis with loss of MeSH gave I (R = Me). I (R = CH2OMe) was transformed into I (R = H) by CF3CO2H. I (R = H) lacked antibacterial activity and β-lactamase-inhibitory properties.

IT 121003-02-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and ester hydrolysis of)

RN 121003-02-9 HCAPLUS

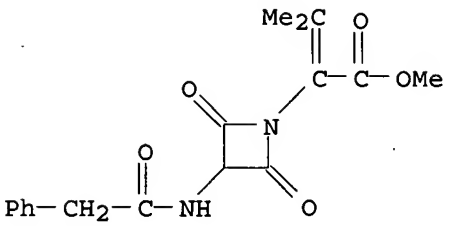
CN 1-Azetidineacetic acid, α-(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]-, methoxymethyl ester (9CI) (CA INDEX NAME)



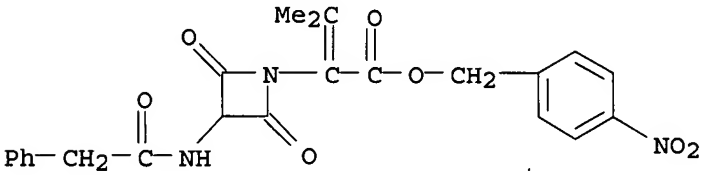
IT 71840-43-2P 121002-97-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 71840-43-2 HCAPLUS

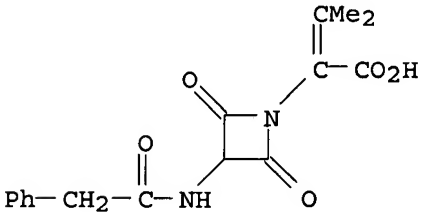
CN 1-Azetidineacetic acid, α-(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]-, methyl ester (9CI) (CA INDEX NAME)



RN 121002-97-9 HCAPLUS
CN 1-Azetidineacetic acid, α-(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]-, (4-nitrophenyl)methyl ester (9CI) (CA INDEX NAME)



IT 121003-03-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, esterification, and bactericidal activity of)
RN 121003-03-0 HCAPLUS
CN 1-Azetidineacetic acid, α-(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]- (9CI) (CA INDEX NAME)



L16 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1982:6476 HCAPLUS
DOCUMENT NUMBER: 96:6476
TITLE: 5,6-Dehydropenicillins
INVENTOR(S): Re, Luciano; Brant, Alberto; Bassignani, Luciano
PATENT ASSIGNEE(S): Snamprogetti SpA, Italy
SOURCE: U.S., 9 pp. Division of U.S. Ser. No. 949,546, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

US 4288366	A	19810908	US 1979-58945		19790719
US 4133807	A	19790109	US 1977-769527		19770217
GB 1572140	A	19800723	GB 1979-1747		19770222
US 4353825	A	19821012	US 1981-236029		19810219
DK 8101952	A	19810501	DK 1981-1952		19810501
DK 8105587	A	19811216	DK 1981-5587		19811216
PRIORITY APPLN. INFO.:			US 1978-949546	A3	19781010
			US 1977-769527	A3	19770217
			IT 1976-20451	A	19760223
			IT 1976-20457		19760223
			DK 1977-771	A	19770222
			GB 1977-7500	A	19770222
			US 1979-58945	A3	19790719

OTHER SOURCE(S): MARPAT 96:6476
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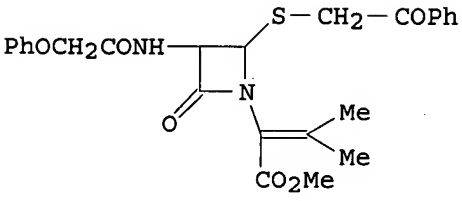

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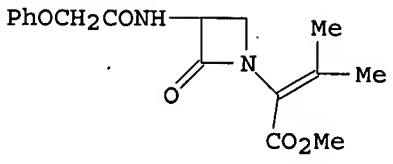

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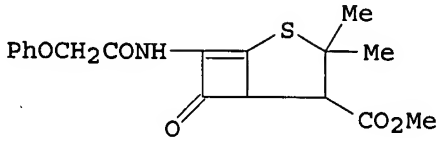
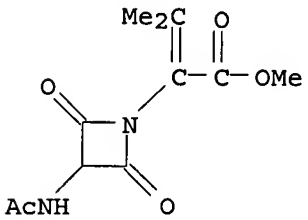


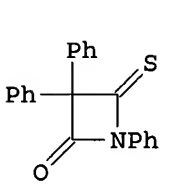
III

AB Irradiation of I gave II which was cyclized to pencillanate III.
IT 79977-00-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 79977-00-7 HCAPLUS
CN 1-Azetidineacetic acid, 3-(acetylamino)-α-(1-methylethylidene)-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)



L16 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1980:180878 HCAPLUS
DOCUMENT NUMBER: 92:180878
TITLE: Properties and reactions of 4-thioxo-2-azetidinones
AUTHOR(S): Bachi, Mario D.; Goldberg, Ora; Gross, Akiva; Vaya, Jacob
CORPORATE SOURCE: Dep. Org. Chem., Weizmann Inst. Sci., Rehovot, Israel

SOURCE: Journal of Organic Chemistry (1980), 45(8), 1481-5
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



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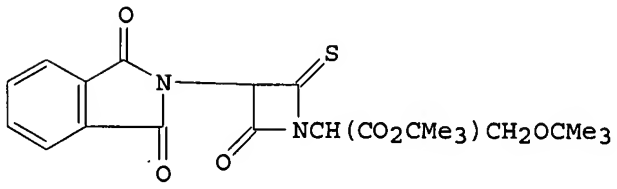

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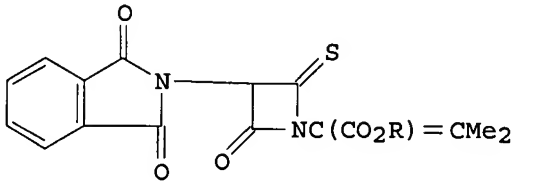
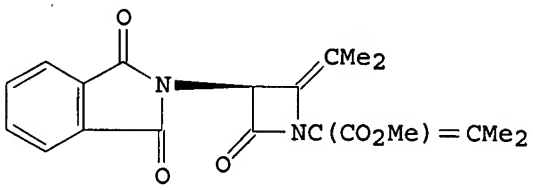


III, R=Me
IV, R=PhCH2



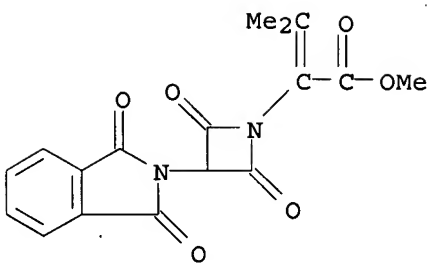
V

AB 4-Thioxo-2-azetidinones I-IV appear to be suitable substrates for contrasting the chemical of the C:O and C:S linkages. Hydrolysis and alcoholysis occur selectively at the carbonyl bond while 1,3-dipolar reagents like diazoalkanes and ozone, as well as carbenes, attack exclusively at the thiocarbonyl function. The 4-alkylidene-2-azetidinones, e.g. I, were obtained from the 4-thioxo-2-azetidinones III or IV and 2-diazopropane, diphenyldiazomethane, or Et diazomalonate. The reactions with 2-diazopropane involved the formation of thiadiazolines from which the S and N elements were extruded. The reactions with the last two reagents which were performed in the presence of Rh(OAc)2 involved carbene intermediates.

IT 69939-41-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 69939-41-9 HCAPLUS

CN 1-Azetidineacetic acid, 3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-α-(1-methylethylidene)-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)



L16 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1980:76192 HCAPLUS
DOCUMENT NUMBER: 92:76192
TITLE: Preparation of 3-phenylacetamidoazetidine-2,4-diones
AUTHOR(S): Kaura, Arun C.; Stoodley, Richard J.
CORPORATE SOURCE: Dep. Org. Chem., Univ. Newcastle upon Tyne, Newcastle upon Tyne, UK
SOURCE: Journal of the Chemical Society, Chemical Communications (1979), (7), 344-5
CODEN: JCCCAT; ISSN: 0022-4936
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 92:76192
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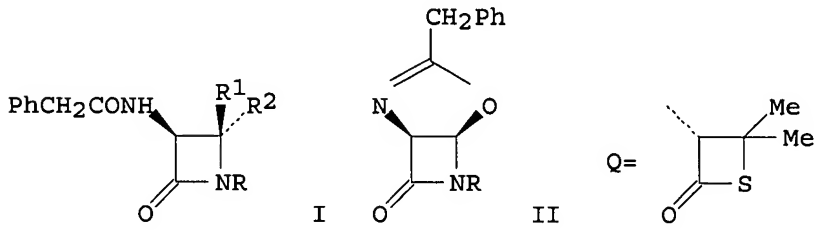
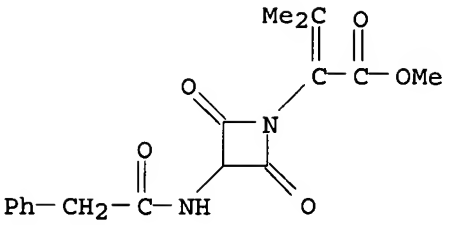


AB Irradiation of pyruvates I [R = C(CO2Me):CMe2, Q, R1 = H, R2 = O2CCOMe], prepared (72% in the former case) by treating oxazoloazetidinones II (R as before) with pyruvic acid, in benzene gave diones I (R as before, R1R2 = O) in 87 and 43% yields, resp.

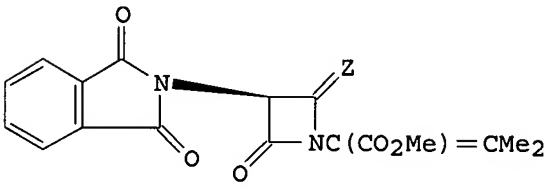
IT 71840-43-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 71840-43-2 HCAPLUS

CN 1-Azetidineacetic acid, α-(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]-, methyl ester (9CI) (CA INDEX NAME)



L16 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1979:168383 HCAPLUS
DOCUMENT NUMBER: 90:168383
TITLE: Reactions of 4-thioxo-2-azetidinones: synthesis of a 2,4-azetidinedione and of 4-alkylidene-2-azetidinones
AUTHOR(S): Bachi, Mario D.; Goldberg, Ora; Gross, Akiva
CORPORATE SOURCE: Dep. Org. Chem., Weizmann Inst. Sci., Rehovot, Israel
SOURCE: Tetrahedron Letters (1978), (43), 4167-70
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



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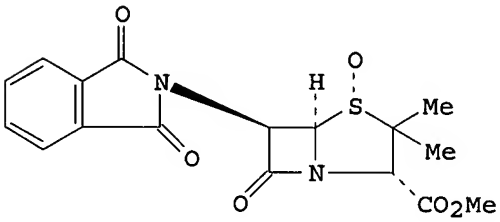

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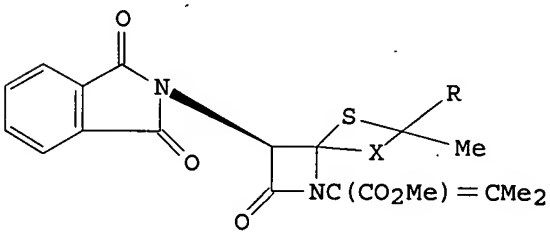
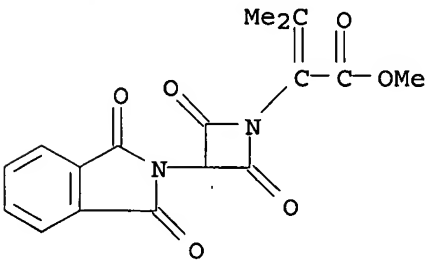


III

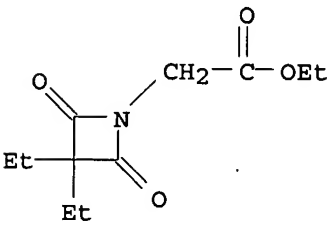
AB Thioxoazetidinone I (Z = S), prepared from sulfoxide II by sequential ring cleavage with CH2:CHCO2Me, isomerization, and thermal elimination reaction, on ozonolysis gave 85% I (Z = O). I (Z = O) is the 1st example of a malonimide bearing an imido group at C-3. Reaction of I (Z = S) with

MeCHN2 gave 45% thiirane III (X = bond, R = H), and with EtCHN2 gave 75% III (X = N:N, R = Me) (IV). III (X = bond, R = Me) was obtained (quant.) on decomposition of IV at ambient temperature for 5 days. I (Z = CHMe, CMe2) were obtained (95%) by desulfuration of III (X = bond, R = H, Me, resp.) with Ph3P in C6H6.

IT 69939-41-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 69939-41-9 HCAPLUS
CN 1-Azetidineacetic acid, 3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-α-(1-methylethylidene)-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)

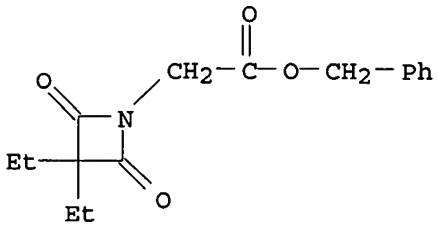


L16 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1972:112987 HCAPLUS
DOCUMENT NUMBER: 76:112987
TITLE: Synthesis of malonimide derivatives as potential penicillin analogs
AUTHOR(S): Golik, Uri
CORPORATE SOURCE: Dep. Chem., Weizmann Inst. Sci., Rehovot, Israel
SOURCE: Journal of Heterocyclic Chemistry (1972), 9(1), 21-4
CODEN: JHTCAD; ISSN: 0022-152X
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Malonimidoacetic acid derivs. (I, II) were synthesized as potential penicillin analogs, but they failed to inhibit the growth of bacteria when tested in vitro against a range of gram-pos. and gram-neg. microorganisms.
IT 35359-51-4P 35359-54-7P 35359-55-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 35359-51-4 HCAPLUS
CN 1-Azetidineacetic acid, 3,3-diethyl-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)

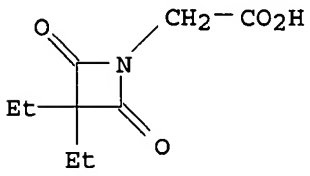


RN 35359-54-7 HCAPLUS

CN 1-Azetidineacetic acid, 3,3-diethyl-2,4-dioxo-, phenylmethyl ester (9CI) (CA INDEX NAME)



RN 35359-55-8 HCAPLUS
CN 1-Azetidineacetic acid, 3,3-diethyl-2,4-dioxo- (9CI) (CA INDEX NAME)



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=> s imidopercarboxylic
L19          5 IMIDOPERCARBOXYLIC

=> d l19 ibib abs hitstr tot

L19  ANSWER 1 OF 5  HCAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         2005:1042379  HCAPLUS
DOCUMENT NUMBER:          143:328182
TITLE:                    Dilution process for imidopercarboxylic
                          acids solution
INVENTOR(S):              Bianchi, Ugo Piero; Garaffa, Roberto
PATENT ASSIGNEE(S):       Solvay Solexis S.p.A., Italy
SOURCE:                   PCT Int. Appl., 22 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE         APPLICATION NO.         DATE
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     WO 2005090544         A1    20050929     WO 2005-EP51172         20050315
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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1727887 A1 20061206 EP 2005-717046 20050315
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR
CN 1930278 A 20070314 CN 2005-80008194 20050315
PRIORITY APPLN. INFO.: IT 2004-MI497 A 20040316
WO 2005-EP51172 W 20050315
OTHER SOURCE(S): MARPAT 143:328182

AB A process for obtaining dilute aqueous solns. containing an amount of < 7% by weight, expressed as a percentage by weight, of imidoalkanepercarboxylic acids, starting with concentrated aqueous compns. of the said peracids in the β form, the said concentrated compns. being obtained from the imidoalkanepercarboxylic acids in the α-crystal form, comprises the following steps: (I) dilution of the concentrated aqueous composition of imidoalkanepercarboxylic acids (C) with an aqueous solution (D) having a pH of between 2 and 5, in a (C):(D) proportion, expressed in parts by weight, of between 0.1:10 and 10:0.2, working at temps. of between 4° and 30°; (II) application to the dilute aqueous composition obtained in (I) of a shear force off at least 5000 s-1, until a constant dynamic viscosity is obtained; (III) dilution of the dilute aqueous composition treated in (II) to obtain an imidoalkanepercarboxylic acid concentration of < 7% by weight; (IV) optionally, final homogenization of the composition Such dilute aqueous compns. are used in detergency applications, in disinfection applications, and are applied by means of dispersers (triggers).

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1127241 HCAPLUS
DOCUMENT NUMBER: 142:76602
TITLE: Manufacture of storage-stable percarboxylic acid-based polyelectrolyte capsule system
INVENTOR(S): Schmiedel, Peter; Buzzacchi, Matteo; Kaiser, Heribert; Von Rybinski, Wolfgang; Orlich, Bernhard
PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft auf Aktien, Germany
SOURCE: PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004110613	A1	20041223	WO 2004-EP6169	20040608

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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10361170	A1	20050105	DE 2003-10361170	20031222
EP 1633471	A1	20060315	EP 2004-739697	20040608
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PRIORITY APPLN. INFO.:			DE 2003-10327127 A	20030613
			DE 2003-10361170 A	20031222
			WO 2004-EP6169 W	20040608

AB A multilayer capsule system containing organic percarboxylic acids, especially imidopercarboxylic acids (e.g. 6-phthalimidoperoxycaproic acid), useful in liquid detergents and cleaners, dental care products, hair dyes, and decolorants or bleaching agents, is manufactured by depositing on percarboxylic acid particles ≥2 different shell layers each based on a polyelectrolyte and/or ionic surfactant. Thus, spraying 300 g Eureco W (72% 6-phthalimidoperoxycaproic acid) at 50° in a fluidized bed with 150 mL Luviquat Care (polycation) containing 1% Sequion 10H60, drying, spraying with 100 mL Sokalan CP 45 containing 1% Sequion 10H60 and repeating the procedure gave encapsulated particles (particle size 200-2000 μm) containing 61% active substance (6-phthalimidoperoxycaproic acid).

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1127240 HCAPLUS
DOCUMENT NUMBER: 142:76601
TITLE: Manufacture of storage-stable percarboxylic acid-based capsules
INVENTOR(S): Schmiedel, Peter; Kaiser, Heribert; Scholl, Elke; Von Rybinski, Wolfgang
PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft auf Aktien, Germany
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004110612	A1	20041223	WO 2004-EP6168	20040608
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,				

SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10361100	A1	20050105	DE 2003-10361100		20031222
EP 1633468	A1	20060315	EP 2004-736308		20040608
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK					
US 2007032396	A1	20070208	US 2005-299166		20051209
PRIORITY APPLN. INFO.:			DE 2003-10327127	A	20030613
			DE 2003-10361100	A	20031222
			WO 2004-EP6168	W	20040608

AB A capsule system containing organic percarboxylic acids, especially imidopercarboxylic acids (e.g. 6-phthalimidoperoxycaproic acid), useful in liquid detergents and cleaners, dental care products, hair dyes, and decolorants or bleaching agents, is manufactured by depositing on percarboxylic acid particles ≥1 inorg. acid salt. Thus, spraying 800 g Eureco W (72% 6-phthalimidoperoxycaproic acid) with 800 g of 20% aqueous Na2SO4 solution containing 1% Sequion 10H60 and separating particles <2.0 mm by sieving gave encapsulated bleach particles containing 70.5% active substance. The encapsulated particles were incorporated in a liquid detergent formulation which was stored at 40° to show 99% and 95% bleach activity after 1 and 2 wk, resp., vs. 75% and 65% for similar composition containing unencapsulated Eureco W.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:1127239 HCAPLUS
DOCUMENT NUMBER: 142:76600
TITLE: Manufacture of gel capsules containing percarboxylic acid bleach
INVENTOR(S): Schmiedel, Peter; Barreleiro, Paula; Von Rybinski, Wolfgang; Orlich, Bernhard
PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft auf Aktien, Germany
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004110611	A1	20041223	WO 2004-EP6167	20040608
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10361084	A1	20050105	DE 2003-10361084	20031222
EP 1633470	A1	20060315	EP 2004-739696	20040608
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
JP 2006527292	T	20061130	JP 2006-515852	20040608
US 2006178285	A1	20060810	US 2005-299795	20051212

naphthalenedicarboximido; each R = H, (un)substituted alkyl, OH, CO2H, CO2OH, CO2R1; R1 = C1-5 (un)substituted alkyl; n = 1-5], prepared by the reaction of H2O2 with the acid or anhydride in concentrated H2SO4 or MeSO3H or in an alkaline medium, are useful as bleaching agents, especially in the laundering of fabrics at low temps. Phthalimidoacetic acid in MeSO3H was treated with H2O2 to give phthalimidoperacetic acid, which was used with a laundry detergent at 40° for the bleaching of cotton fabrics stained with red wine.

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	113.44	978.65

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-9.36	-9.36

FILE 'REGISTRY' ENTERED AT 11:22:22 ON 18 MAY 2007

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9
DICTIONARY FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
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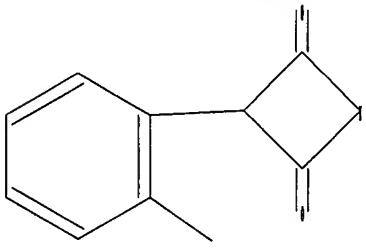

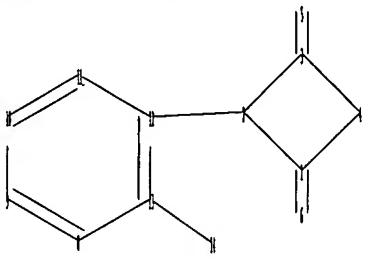

chain nodes :
5 6 14

10519835.trn

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ring nodes :
1  2  3  4  8  9  10  11  12  13
chain bonds :
1-6  2-12  3-5  13-14
ring bonds :
1-2  1-4  2-3  3-4  8-9  8-13  9-10  10-11  11-12  12-13
exact/norm bonds :
1-2  1-4  1-6  2-3  3-4  3-5
exact bonds :
2-12  13-14
normalized bonds :
8-9  8-13  9-10  10-11  11-12  12-13
isolated ring systems :
containing 1 : 8 :


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:CLASS  6:CLASS  8:Atom  9:Atom  10:Atom  11:Atom
12:Atom  13:Atom  14:CLASS



L20     STRUCTURE UPLOADED

=> d l20
L20 HAS NO ANSWERS
L20             STR
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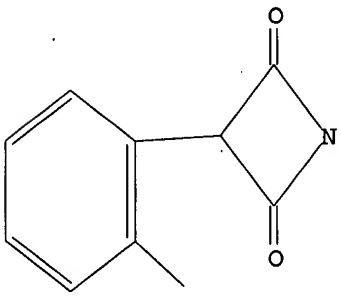


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Structure attributes must be viewed using STN Express query preparation.


=> s l20
SAMPLE SEARCH INITIATED 11:22:41 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -        4 TO ITERATE

100.0% PROCESSED        4 ITERATIONS                                1 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:             4 TO      200
PROJECTED ANSWERS:                1 TO       80

L21           1 SEA SSS SAM L20

=> s l20 sss full
```

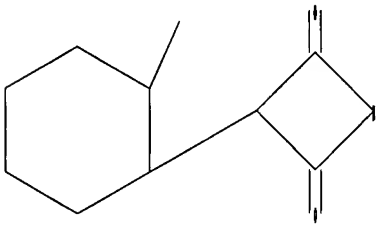
10519835.trn

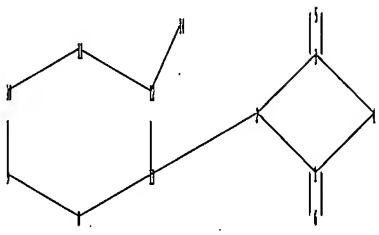
FULL SEARCH INITIATED 11:22:48 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 83 TO ITERATE

100.0% PROCESSED 83 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01

L22 2 SEA SSS FUL L20

=>
Uploading C:\Program Files\Stnexp\Queries\10519835f.str





chain nodes :
5 6 14
ring nodes :
1 2 3 4 8 9 10 11 12 13
chain bonds :
1-6 2-13 3-5 12-14
ring bonds :
1-2 1-4 2-3 3-4 8-9 8-13 9-10 10-11 11-12 12-13
exact/norm bonds :
1-2 1-4 1-6 2-3 3-4 3-5
exact bonds :
2-13 8-9 8-13 9-10 10-11 11-12 12-13 12-14
isolated ring systems :
containing 1 : 8 :

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 8:Atom 9:Atom 10:Atom 11:Atom
12:Atom 13:Atom 14:CLASS

<------User Break------>

PRIORITY APPLN. INFO.: DE 2003-10327127 A 20030613
DE 2003-10361084 A 20031222
WO 2004-EP6167 W 20040608

AB Storage-stable gel capsules containing organic percarboxylic acids, especially imidopercarboxylic acids (e.g. 6-phthalimidoperoxycaproic acid), useful especially in liquid detergents and cleaners, dental care products, hair dyes, and decolorants or bleaching compns. for tech. applications, were manufactured by incorporating solid percarboxylic acid particles in a gel matrix obtained by solidification and/or gelling of an oil phase m. <35°, e.g., a paraffin oil, glyceride, vegetable oil, etc., and containing a gel-forming agent and stabilizing agent, e.g., a block copolymer. For example, adding 2% Kraton G 1650 to low-viscosity paraffin oil at 70° with stirring gave a homogeneous solution which was cooled to 40°, 60% (based on paraffin oil + Kraton) of homogenized Eureco W (72% 6-phthalimidoperoxycaproic acid) was added with stirring, the mixture was poured in 5 vols. of H2O with stirring, and cooled. The encapsulated 6-phthalimidoperoxycaproic acid particles which settled at the bottom were separated and the fraction <1 mm incorporated (6%) in a liquid detergent composition which was stored at 40° to give 100.0% and 99.2% active O content after 1 and 2 wk, resp., vs. 87.5 and 80.0% for similar detergent containing non-capsulated Eureco W.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:80000 HCAPLUS
DOCUMENT NUMBER: 112:80000
TITLE: Bleaching agents comprising aromatic imide percarboxylic acids and their preparation and use
INVENTOR(S): Venturello, Carlo; Cavallotti, Caludio; Burzio, Fulvio
PATENT ASSIGNEE(S): Ausimont S.p.A., Italy
SOURCE: Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 325289	A1	19890726	EP 1989-101003	19890120
EP 325289	B1	19930901		
R: AT, BE, CH, DE, ES, FR, GB, LI, NL, SE				
AU 8928678	A	19890720	AU 1989-28678	19890120
AU 614322	B2	19910829		
JP 02001473	A	19900105	JP 1989-11742	19890120
JP 2786222	B2	19980813		
AT 93908	T	19930915	AT 1989-101003	19890120
ES 2058348	T3	19941101	ES 1989-101003	19890120
CA 1340680	C	19990727	CA 1989-588845	19890120
BR 8900265	A	19890919	BR 1989-265	19890123
US 5520844	A	19960528	US 1991-637479	19910104
US 5688434	A	19971118	US 1996-593655	19960129

PRIORITY APPLN. INFO.: IT 1988-19131 A 19880120
US 1989-298918 B1 19890119
EP 1989-101003 A 19890120
US 1991-637479 A3 19910104

OTHER SOURCE(S): MARPAT 112:80000

AB Peroxy acids X(CHR)nCO2OH [X = (un)substituted phthalimido or

2nd

10519835.trn

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1626GMS

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	JAN 08	CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS 3	JAN 16	CA/CAplus Company Name Thesaurus enhanced and reloaded
NEWS 4	JAN 16	IPC version 2007.01 thesaurus available on STN
NEWS 5	JAN 16	WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
NEWS 6	JAN 22	CA/CAplus updated with revised CAS roles
NEWS 7	JAN 22	CA/CAplus enhanced with patent applications from India
NEWS 8	JAN 29	PHAR reloaded with new search and display fields
NEWS 9	JAN 29	CAS Registry Number crossover limit increased to 300,000 in multiple databases
NEWS 10	FEB 15	PATDPASPC enhanced with Drug Approval numbers
NEWS 11	FEB 15	RUSSIAPAT enhanced with pre-1994 records
NEWS 12	FEB 23	KOREAPAT enhanced with IPC 8 features and functionality
NEWS 13	FEB 26	MEDLINE reloaded with enhancements
NEWS 14	FEB 26	EMBASE enhanced with Clinical Trial Number field
NEWS 15	FEB 26	TOXCENTER enhanced with reloaded MEDLINE
NEWS 16	FEB 26	IFICDB/IFIPAT/IFIUDB reloaded with enhancements
NEWS 17	FEB 26	CAS Registry Number crossover limit increased from 10,000 to 300,000 in multiple databases
NEWS 18	MAR 15	WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS 19	MAR 16	CASREACT coverage extended
NEWS 20	MAR 20	MARPAT now updated daily
NEWS 21	MAR 22	LWPI reloaded
NEWS 22	MAR 30	RDISCLOSURE reloaded with enhancements
NEWS 23	APR 02	JICST-EPLUS removed from database clusters and STN
NEWS 24	APR 30	GENBANK reloaded and enhanced with Genome Project ID field
NEWS 25	APR 30	CHEMCATS enhanced with 1.2 million new records
NEWS 26	APR 30	CA/CAplus enhanced with 1870-1889 U.S. patent records
NEWS 27	APR 30	INPADOC replaced by INPADOCDB on STN
NEWS 28	MAY 01	New CAS web site launched
NEWS 29	MAY 08	CA/CAplus Indian patent publication number format defined
NEWS 30	MAY 14	RDISCLOSURE on STN Easy enhanced with new search and display fields
NEWS EXPRESS		NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
NEWS HOURS		STN Operating Hours Plus Help Desk Availability
NEWS LOGIN		Welcome Banner and News Items
NEWS IPC8		For general information regarding STN implementation of IPC 8

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* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 14:33:37 ON 18 MAY 2007

=>
Uploading
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Do you want to switch to the Registry File?
Choice (Y/n):
Switching to the Registry File...
Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 14:33:53 ON 18 MAY 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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STRUCTURE FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9
DICTIONARY FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9

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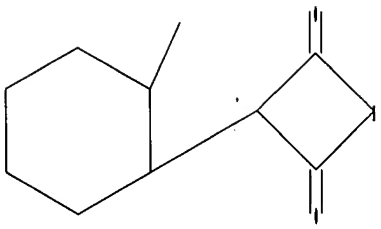
TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

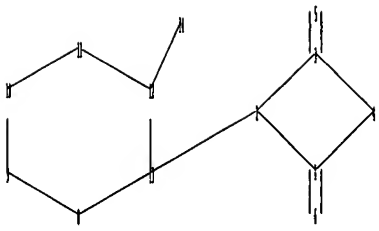
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\10519835f.str



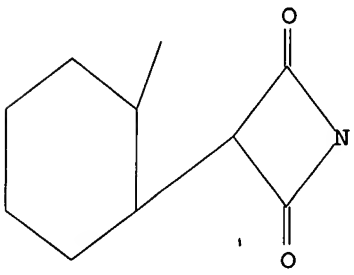


chain nodes :
5 6 14
ring nodes :
1 2 3 4 8 9 10 11 12 13
chain bonds :
1-6 2-13 3-5 12-14
ring bonds :
1-2 1-4 2-3 3-4 8-9 8-13 9-10 10-11 11-12 12-13
exact/norm bonds :
1-2 1-4 1-6 2-3 3-4 3-5
exact bonds :
2-13 8-9 8-13 9-10 10-11 11-12 12-13 12-14
isolated ring systems :
containing 1 : 8 :

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 8:Atom 9:Atom 10:Atom 11:Atom
12:Atom 13:Atom 14:CLASS

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1
SAMPLE SEARCH INITIATED 14:34:06 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 0 TO 0
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 sss full
FULL SEARCH INITIATED 14:34:12 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 52 TO ITERATE

100.0% PROCESSED 52 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

L3 0 SEA SSS FUL L1

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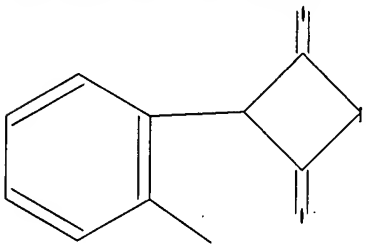
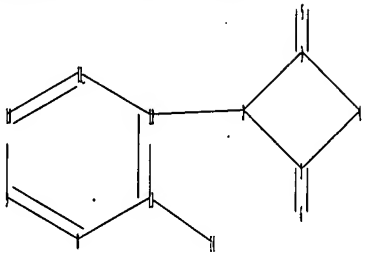
Uploading C:\Program Files\Stnexp\Queries\10519835e.str





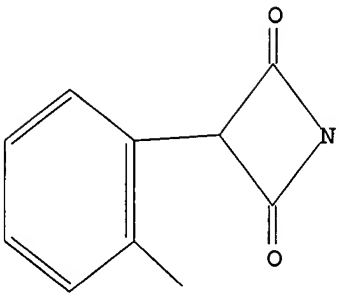
chain nodes :
5 6 14
ring nodes :
1 2 3 4 8 9 10 11 12 13
chain bonds :
1-6 2-12 3-5 13-14
ring bonds :
1-2 1-4 2-3 3-4 8-9 8-13 9-10 10-11 11-12 12-13
exact/norm bonds :
1-2 1-4 1-6 2-3 3-4 3-5
exact bonds :
2-12 13-14
normalized bonds :
8-9 8-13 9-10 10-11 11-12 12-13
isolated ring systems :
containing 1 : 8 :

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 8:Atom 9:Atom 10:Atom 11:Atom
12:Atom 13:Atom 14:CLASS

L4 STRUCTURE UPLOADED

=> d l4
L4 HAS NO ANSWERS

L4 STR



Structure attributes must be viewed using STN Express query preparation.

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=> s l4
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SAMPLE SCREEN SEARCH COMPLETED -        4 TO ITERATE

100.0% PROCESSED         4 ITERATIONS                                1 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:            4 TO      200
PROJECTED ANSWERS:               1 TO       80

L5             1 SEA SSS SAM L4

=> s l4 sss full
FULL SEARCH INITIATED 14:36:09 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -       83 TO ITERATE

100.0% PROCESSED        83 ITERATIONS                                2 ANSWERS
SEARCH TIME: 00.00.01

L6             2 SEA SSS FUL L4

=> FIL HCAPLUS
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   345.10     345.31

FILE 'HCAPLUS' ENTERED AT 14:36:14 ON 18 MAY 2007
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FILE COVERS 1907 - 18 May 2007 VOL 146 ISS 22
FILE LAST UPDATED: 15 May 2007 (20070515/ED)

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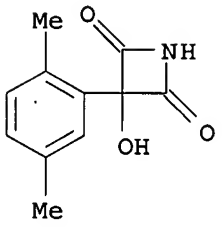
This file contains CAS Registry Numbers for easy and accurate

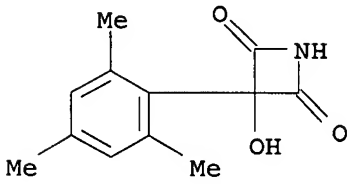
=> s l6
L7 1 L6

=> d l7 ibib abs hitstr tot

L7 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1940:6252 HCAPLUS
DOCUMENT NUMBER: 34:6252
ORIGINAL REFERENCE NO.: 34:1012i,1013a-c
TITLE: Azetidine derivatives. I. 2,4-Diketo-3-hydroxy-3-arylazetidines
AUTHOR(S): Riebsomer, J. L.; Burkett, Howard; Hodgson, Thomas; Senour, Fred
SOURCE: Journal of the American Chemical Society (1939), 61, 3491-3
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
GI For diagram(s), see printed CA Issue.
AB Ph(OH)C(CO2Et)2 (25 g.) and 7.5 g. Na in 80 cc. absolute EtOH, heated to 115-20° and treated with 10 g. CO(NH2)2, stirred at 115-20° for 5 hrs., 10 g. CO(NH2)2 again added and the stirring and heating continued for about 11 hrs., the solution evaporated to dryness, the product dissolved in 100 cc. H2O, 50 g. ice and 10% HCl added until the solution is acid, and the solution extracted with Et2O, give 17% of 2,4-diketo-3-hydroxy-3-phenylazetidine, PhC(OH).CO.NH.CO, m. 107.5-8°; NH3 may be bubbled into the mixture instead of the addition of CO(NH2)2, the yield being about 3%. Similarly prepared were the p-tolyl derivative, m. 131° (9%); the p-ethylphenyl derivative, m. 105-6° (24%); the 2,5-dimethylphenyl derivative, m. 135-6° (37%); the mesityl derivative, m. 151-2° (6%); the p-sec-butylphenyl derivative, m. 89-90° (38%). The structure of these compds. follows from their hydrolysis with NaOH to PhCH(OH)CO2H and its derivs., Ph(HO)C(CO2Na)2 being assumed as an intermediate. These compds. are inactive as hypnotics when given to rabbits and are toxic in relatively small doses.
IT 857955-59-0P, Tartronimide, α-2,5-xylyl-
857955-73-8P, Tartronimide, α-(mesityl)-
RL: PREP (Preparation)
(preparation of)
RN 857955-59-0 HCAPLUS
CN Tartronimide, α-2,5-xylyl- (4CI) (CA INDEX NAME)



RN 857955-73-8 HCAPLUS
CN Tartronimide, α-(mesityl)- (4CI) (CA INDEX NAME)



=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	15.67	360.98

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.78	-0.78

FILE 'REGISTRY' ENTERED AT 14:38:51 ON 18 MAY 2007
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9
DICTIONARY FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9

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TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

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http://www.cas.org/support/stngen/stndoc/properties.html

10519835.trn

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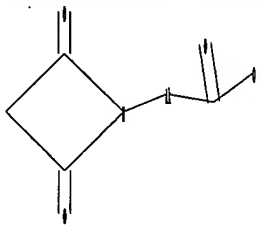
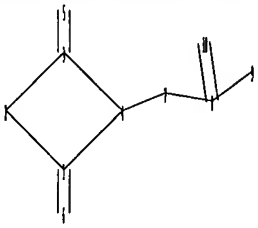


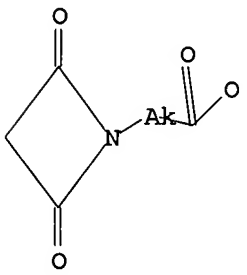


chain nodes :
5 6 7 8 9 10
ring nodes :
1 2 3 4
chain bonds :
1-6 3-5 4-7 7-8 8-9 8-10
ring bonds :
1-2 1-4 2-3 3-4
exact/norm bonds :
1-2 1-4 1-6 2-3 3-4 3-5 4-7 7-8 8-9 8-10
isolated ring systems :
containing 1 :

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS

L8 STRUCTURE UPLOADED

=> d l8
L8 HAS NO ANSWERS
L8 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l8
SAMPLE SEARCH INITIATED 14:39:05 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 351 TO ITERATE

100.0% PROCESSED 351 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

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FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:         5896 TO     8144
PROJECTED ANSWERS:               0 TO        0

L9             0 SEA SSS SAM L8

=> s l8 sss full
FULL SEARCH INITIATED 14:39:12 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -     6664 TO ITERATE

100.0% PROCESSED     6664 ITERATIONS                                 11 ANSWERS
SEARCH TIME: 00.00.01

L10           11 SEA SSS FUL L8

=> FIL HCAPLUS
COST IN U.S. DOLLARS                                  SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                     172.10     533.08

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)            SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                       0.00      -0.78

FILE 'HCAPLUS' ENTERED AT 14:39:18 ON 18 MAY 2007
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FILE COVERS 1907 - 18 May 2007  VOL 146 ISS 22
FILE LAST UPDATED: 15 May 2007  (20070515/ED)

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 This file contains CAS Registry Numbers for easy and accurate

=> s l10
L11           7 L10

=> d l11 ibib abs hitstr tot

L11  ANSWER 1 OF 7  HCAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         1992:469674  HCAPLUS
DOCUMENT NUMBER:          117:69674
TITLE:                    A facile synthesis of azetidine-2,4-diones
AUTHOR(S):                Bari, S. S.; Trehan, I. R.; Sharma, A. K.; Manhas, M.
                          S.
```
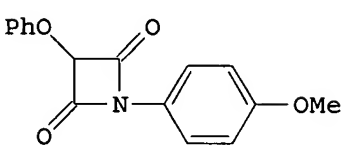

CORPORATE SOURCE: Dep. Chem., Panjab Univ., Chandigarh, India
SOURCE: Synthesis (1992), (5), 439-42
CODEN: SYNTBF; ISSN: 0039-7881
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 117:69674
GI



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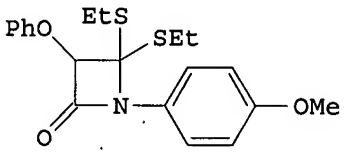
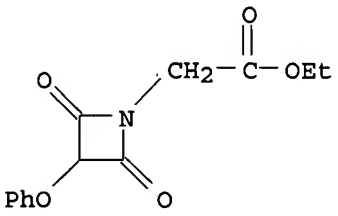
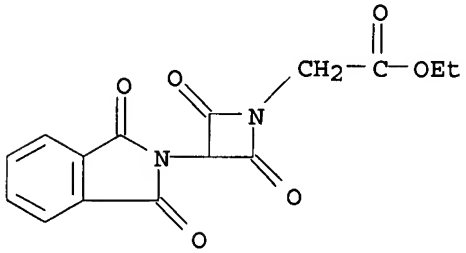


II

AB Azetidine-2,4-diones, e.g. I, can be conveniently synthesized by mild oxidative hydrolysis of 4,4-bis(alkylthio)azetidin-2-ones, e.g. II, using N-bromosuccinimide.
IT 142389-08-0P 142389-09-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 142389-08-0 HCAPLUS
CN 1-Azetidineacetic acid, 2,4-dioxo-3-phenoxy-, ethyl ester (9CI) (CA INDEX NAME)



RN 142389-09-1 HCAPLUS
CN 1-Azetidineacetic acid, 3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



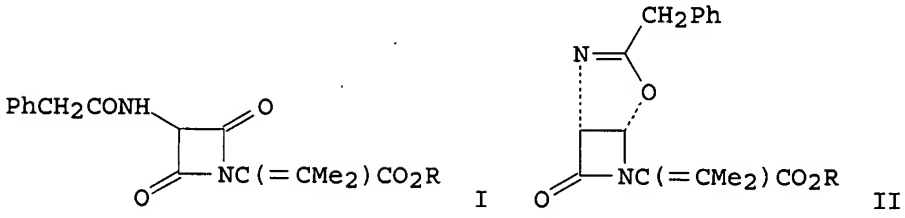
L11 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:407106 HCAPLUS
DOCUMENT NUMBER: 111:7106
TITLE: Studies related to penicillins. Part 26. Conversion of potassium benzylpenicillinate into 1-substituted

derivatives of 3-phenylacetamidoazetidine-2,4-dione

AUTHOR(S): Kaura, Arun C.; Stoodley, Richard J.
CORPORATE SOURCE: Dep. Org. Chem., Univ. Newcastle upon Tyne, Newcastle upon Tyne, NE1 7RU, UK

SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1988), (10), 2813-20
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 111:7106

GI

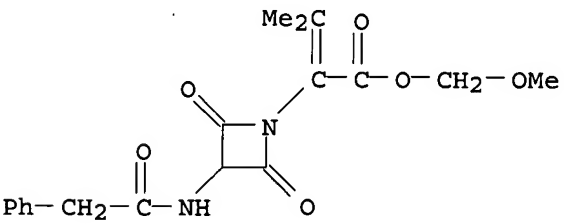


AB A new method for the synthesis of azetidine-2,4-diones, involving a Norrish Type II photoreaction of 4-pyruvoylazetidin-2-ones, has been devised. The process features in two strategies in which potassium benzylpenicillinate is converted into azetidine-2,4-diones I (R = Me, CH2C6H4NO2-4, CHCOMe). In one strategy, oxadiazabicyclo[3.2.0]heptenones II were treated with pyruvic acid to give the (3R,4R)-3-phenylacetamido-4-pyruvoyloxyazetidin-2-ones (III), photolysis converted III into I. II were derived from (2R,3S)-4-oxo-3-phenylacetamidoazetidine-2-sulfinic acids by a novel oxidative desulfinylation induced by Pb(OAc)4. In the second strategy, (1S,5R)-analogs of II were treated with pyruvic acid to give (3S,4S)-3-phenylacetamido-4-pyruvoyloxyazetidin-2-ones. Photolysis with loss of MeSH gave I (R = Me). I (R = CH2OMe) was transformed into I (R = H) by CF3CO2H. I (R = H) lacked antibacterial activity and β-lactamase-inhibitory properties.

IT 121003-02-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and ester hydrolysis of)

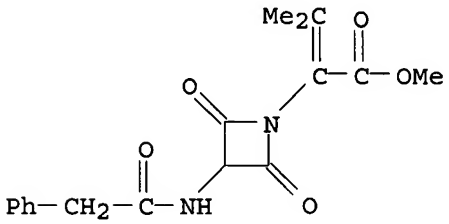
RN 121003-02-9 HCAPLUS

CN 1-Azetidineacetic acid, α-(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]-, methoxymethyl ester (9CI) (CA INDEX NAME)

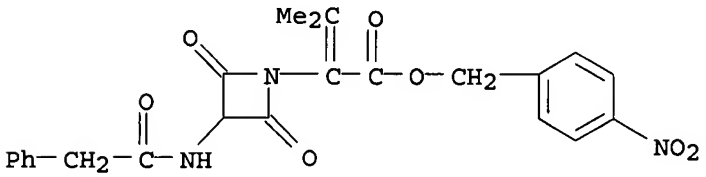


IT 71840-43-2P 121002-97-9P
RL: SPN (Synthetic preparation); PREP (Preparation)

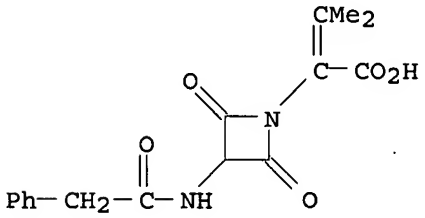
(preparation of)
RN 71840-43-2 HCAPLUS
CN 1-Azetidineacetic acid, α-(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]-, methyl ester (9CI) (CA INDEX NAME)



RN 121002-97-9 HCAPLUS
CN 1-Azetidineacetic acid, α-(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]-, (4-nitrophenyl)methyl ester (9CI) (CA INDEX NAME)



IT 121003-03-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, esterification, and bactericidal activity of)
RN 121003-03-0 HCAPLUS
CN 1-Azetidineacetic acid, α-(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]- (9CI) (CA INDEX NAME)



L11 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1982:6476 HCAPLUS
DOCUMENT NUMBER: 96:6476
TITLE: 5,6-Dehydropenicillins
INVENTOR(S): Re, Luciano; Brant, Alberto; Bassignani, Luciano
PATENT ASSIGNEE(S): Snamprogetti SpA, Italy
SOURCE: U.S., 9 pp. Division of U.S. Ser. No. 949,546, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 4288366	A	19810908	US 1979-58945		19790719
US 4133807	A	19790109	US 1977-769527		19770217
GB 1572140	A	19800723	GB 1979-1747		19770222
US 4353825	A	19821012	US 1981-236029		19810219
DK 8101952	A	19810501	DK 1981-1952		19810501
DK 8105587	A	19811216	DK 1981-5587		19811216
PRIORITY APPLN. INFO.:			US 1978-949546	A3	19781010
			US 1977-769527	A3	19770217
			IT 1976-20451	A	19760223
			IT 1976-20457		19760223
			DK 1977-771	A	19770222
			GB 1977-7500	A	19770222
			US 1979-58945	A3	19790719

OTHER SOURCE(S): MARPAT 96:6476
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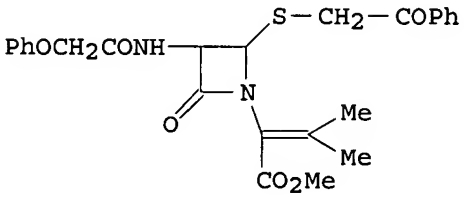

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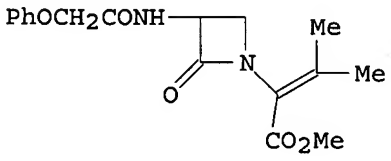

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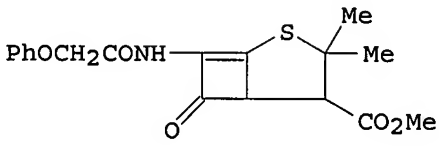
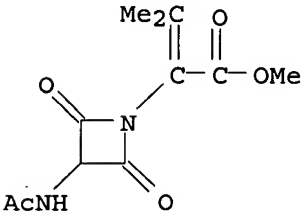


III

AB Irradiation of I gave II which was cyclized to pencillanate III.
IT 79977-00-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 79977-00-7 HCAPLUS
CN 1-Azetidineacetic acid, 3-(acetylamino)-α-(1-methylethylidene)-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)



L11 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1980:180878 HCAPLUS

DOCUMENT NUMBER: 92:180878
TITLE: Properties and reactions of 4-thioxo-2-azetidinones
AUTHOR(S): Bachi, Mario D.; Goldberg, Ora; Gross, Akiva; Vaya, Jacob
CORPORATE SOURCE: Dep. Org. Chem., Weizmann Inst. Sci., Rehovot, Israel
SOURCE: Journal of Organic Chemistry (1980), 45(8), 1481-5
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
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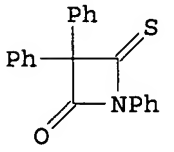

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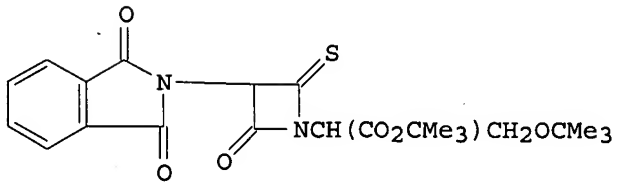

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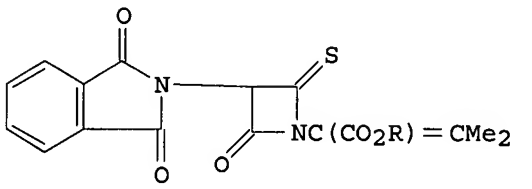
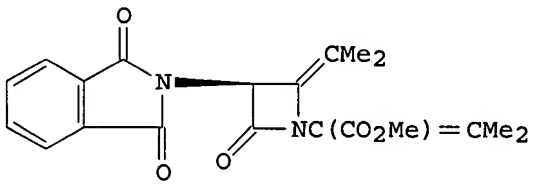


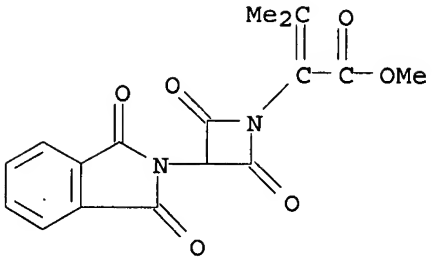
III, R=Me
IV, R=PhCH2



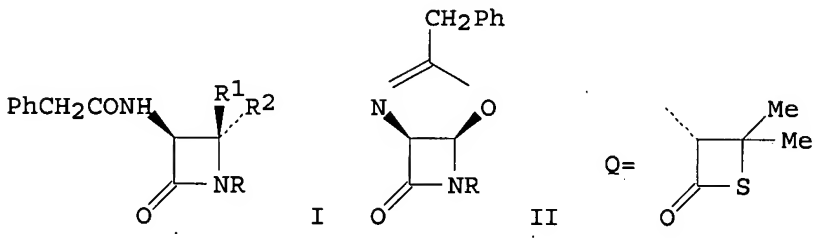
V

AB 4-Thioxo-2-azetidinones I-IV appear to be suitable substrates for contrasting the chemical of the C:O and C:S linkages. Hydrolysis and alcoholysis occur selectively at the carbonyl bond while 1,3-dipolar reagents like diazoalkanes and ozone, as well as carbenes, attack exclusively at the thiocarbonyl function. The 4-alkylidene-2-azetidinones, e.g. I, were obtained from the 4-thioxo-2-azetidinones III or IV and 2-diazopropane, diphenyldiazomethane, or Et diazomalonate. The reactions with 2-diazopropane involved the formation of thiadiazolines from which the S and N elements were extruded. The reactions with the last two reagents which were performed in the presence of Rh(OAc)2 involved carbene intermediates.

IT 69939-41-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 69939-41-9 HCAPLUS
CN 1-Azetidineacetic acid, 3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-α-(1-methylethylidene)-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)



L11 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1980:76192 HCAPLUS
DOCUMENT NUMBER: 92:76192
TITLE: Preparation of 3-phenylacetamidoazetidine-2,4-diones
AUTHOR(S): Kaura, Arun C.; Stoodley, Richard J.
CORPORATE SOURCE: Dep. Org. Chem., Univ. Newcastle upon Tyne, Newcastle upon Tyne, UK
SOURCE: Journal of the Chemical Society, Chemical Communications (1979), (7), 344-5
CODEN: JCCCAT; ISSN: 0022-4936
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 92:76192
GI

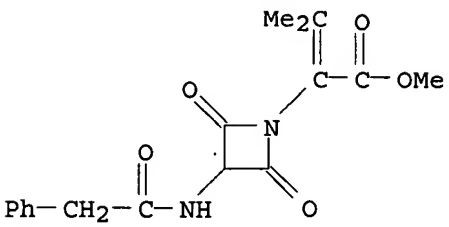


AB Irradiation of pyruvates I [R = C(CO2Me):CMe2, Q, R1 = H, R2 = O2CCOMe], prepared (72% in the former case) by treating oxazoloazetidinones II (R as before) with pyruvic acid, in benzene gave diones I (R as before, R1R2 = O) in 87 and 43% yields, resp.

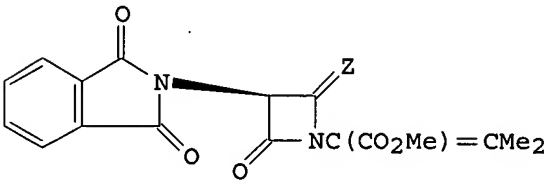
IT 71840-43-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 71840-43-2 HCAPLUS

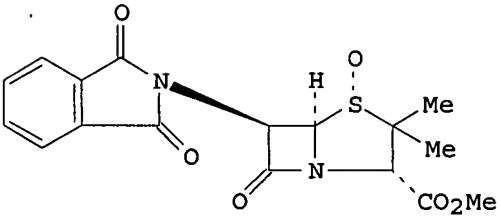
CN 1-Azetidineacetic acid, α-(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]-, methyl ester (9CI) (CA INDEX NAME)



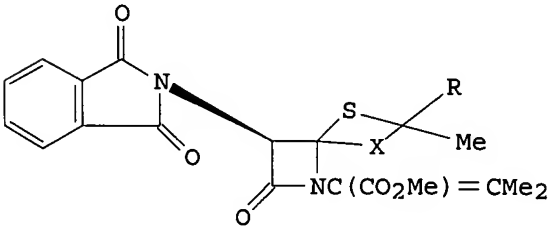
L11 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1979:168383 HCAPLUS
DOCUMENT NUMBER: 90:168383
TITLE: Reactions of 4-thioxo-2-azetidinones: synthesis of a 2,4-azetidinedione and of 4-alkylidene-2-azetidinones
AUTHOR(S): Bachi, Mario D.; Goldberg, Ora; Gross, Akiva
CORPORATE SOURCE: Dep. Org. Chem., Weizmann Inst. Sci., Rehovot, Israel
SOURCE: Tetrahedron Letters (1978), (43), 4167-70
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I



II



III

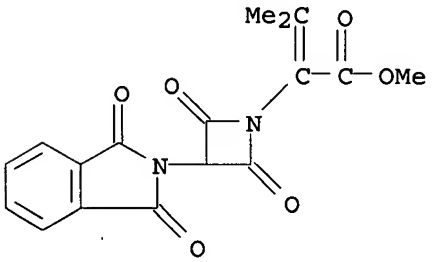
AB Thioxoazetidinone I (Z = S), prepared from sulfoxide II by sequential ring cleavage with CH2:CHCO2Me, isomerization, and thermal elimination reaction, on ozonolysis gave 85% I (Z = O). I (Z = O) is the 1st example of a malonimide bearing an imido group at C-3. Reaction of I (Z = S) with

MeCHN2 gave 45% thiirane III (X = bond, R = H), and with EtCHN2 gave 75% III (X = N:N, R = Me) (IV). III (X = bond, R = Me) was obtained (quant.) on decomposition of IV at ambient temperature for 5 days. I (Z = CHMe, CMe2) were obtained (95%) by desulfuration of III (X = bond, R = H, Me, resp.) with Ph3P in C6H6.

IT 69939-41-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 69939-41-9 HCAPLUS

CN 1-Azetidineacetic acid, 3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-α-(1-methylethylidene)-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)



L11 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1972:112987 HCAPLUS

DOCUMENT NUMBER: 76:112987

TITLE: Synthesis of malonimide derivatives as potential penicillin analogs

AUTHOR(S): Golik, Uri

CORPORATE SOURCE: Dep. Chem., Weizmann Inst. Sci., Rehovot, Israel

SOURCE: Journal of Heterocyclic Chemistry (1972), 9(1), 21-4
CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE: Journal

LANGUAGE: English

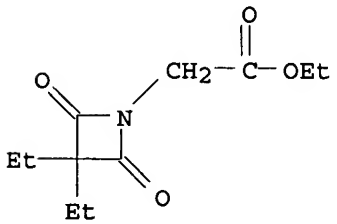
GI For diagram(s), see printed CA Issue.

AB Malonimidoacetic acid derivs. (I, II) were synthesized as potential penicillin analogs, but they failed to inhibit the growth of bacteria when tested in vitro against a range of gram-pos. and gram-neg. microorganisms.

IT 35359-51-4P 35359-54-7P 35359-55-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

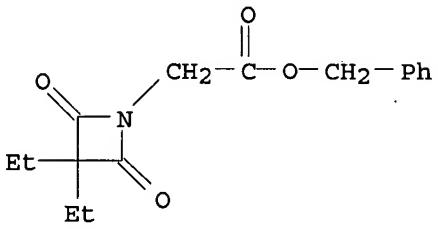
RN 35359-51-4 HCAPLUS

CN 1-Azetidineacetic acid, 3,3-diethyl-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)

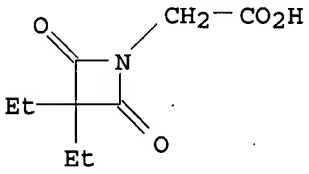


RN 35359-54-7 HCAPLUS

CN 1-Azetidineacetic acid, 3,3-diethyl-2,4-dioxo-, phenylmethyl ester (9CI) (CA INDEX NAME)



RN 35359-55-8 HCAPLUS
CN 1-Azetidineacetic acid, 3,3-diethyl-2,4-dioxo- (9CI) (CA INDEX NAME)



=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	52.49	585.57

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-5.46	-6.24

FILE 'REGISTRY' ENTERED AT 14:42:37 ON 18 MAY 2007
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STRUCTURE FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9
DICTIONARY FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

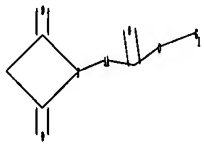
Please note that search-term pricing does apply when conducting SmartSELECT searches.

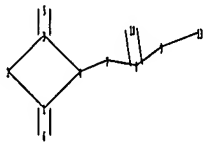
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

10519835.trn

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\10519835g.str





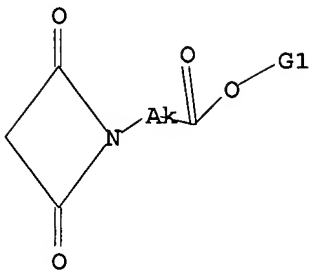
chain nodes :
5 6 7 8 9 10 13
ring nodes :
1 2 3 4
chain bonds :
1-6 3-5 4-7 7-8 8-9 8-10 9-13
ring bonds :
1-2 1-4 2-3 3-4
exact/norm bonds :
1-2 1-4 1-6 2-3 3-4 3-5 4-7 7-8 8-9 8-10 9-13
isolated ring systems :
containing 1 :

G1:H,M

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 13:CLASS

L12 STRUCTURE UPLOADED

=> d l12
L12 HAS NO ANSWERS
L12 STR



G1 H,'M

Structure attributes must be viewed using STN Express query preparation.

```
=> s l12
SAMPLE SEARCH INITIATED 14:42:54 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      351 TO ITERATE

100.0% PROCESSED      351 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:          5896 TO     8144
PROJECTED ANSWERS:                0 TO        0

L13            0 SEA SSS SAM L12

=> s l12 sss full
FULL SEARCH INITIATED 14:43:00 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -     6664 TO ITERATE

100.0% PROCESSED     6664 ITERATIONS                                2 ANSWERS
SEARCH TIME: 00.00.01

L14            2 SEA SSS FUL L12

=> FIL HCAPLUS
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                   172.10     757.67

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                      ENTRY    SESSION
CA SUBSCRIBER PRICE                                     0.00      -6.24

FILE 'HCAPLUS' ENTERED AT 14:43:07 ON 18 MAY 2007
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```

10519835.trn

FILE COVERS 1907 - 18 May 2007 VOL 146 ISS 22
FILE LAST UPDATED: 15 May 2007 (20070515/ED)

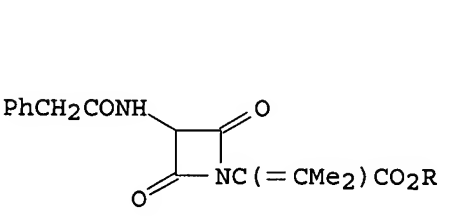
New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate

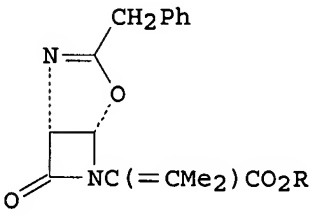
=> s l14
L15 2 L14

=> d l15 ibib abs hitstr tot

L15 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:407106 HCAPLUS
DOCUMENT NUMBER: 111:7106
TITLE: Studies related to penicillins. Part 26. Conversion of potassium benzylpenicillinate into 1-substituted derivatives of 3-phenylacetamidoazetidine-2,4-dione
AUTHOR(S): Kaura, Arun C.; Stoodley, Richard J.
CORPORATE SOURCE: Dep. Org. Chem., Univ. Newcastle upon Tyne, Newcastle upon Tyne, NE1 7RU, UK
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1988), (10), 2813-20
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 111:7106
GI



I



II

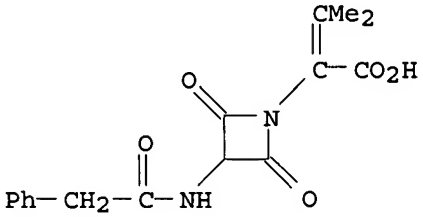
AB A new method for the synthesis of azetidine-2,4-diones, involving a Norrish Type II photoreaction of 4-pyruvoylazetidin-2-ones, has been devised. The process features in two strategies in which potassium benzylpenicillinate is converted into azetidine-2,4-diones I (R = Me, CH2C6H4NO2-4, CHCOMe). In one strategy, oxadiazabicyclo[3.2.0]heptenones II were treated with pyruvic acid to give the (3R,4R)-3-phenylacetamido-4-pyruvoyloxyazetidin-2-ones (III), photolysis converted III into I. II were derived from (2R,3S)-4-oxo-3-phenylacetamidoazetidine-2-sulfinic acids by a novel oxidative desulfinylation induced by Pb(OAc)4. In the second strategy, (1S,5R)-analogs of II were treated with pyruvic acid to give (3S,4S)-3-phenylacetamido-4-pyruvoyloxyazetidin-2-ones. Photolysis with loss of MeSH gave I (R = Me). I (R = CH2OMe) was transformed into I

(R = H) by CF3CO2H. I (R = H) lacked antibacterial activity and β-lactamase-inhibitory properties.

IT 121003-03-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, esterification, and bactericidal activity of)

RN 121003-03-0 HCAPLUS

CN 1-Azetidineacetic acid, α-(1-methylethylidene)-2,4-dioxo-3-[(phenylacetyl)amino]- (9CI) (CA INDEX NAME)



L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1972:112987 HCAPLUS

DOCUMENT NUMBER: 76:112987

TITLE: Synthesis of malonimide derivatives as potential penicillin analogs

AUTHOR(S): Golik, Uri

CORPORATE SOURCE: Dep. Chem., Weizmann Inst. Sci., Rehovot, Israel

SOURCE: Journal of Heterocyclic Chemistry (1972), 9(1), 21-4
CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE: Journal

LANGUAGE: English

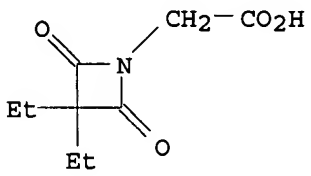
GI For diagram(s), see printed CA Issue.

AB Malonimidoacetic acid derivs. (I, II) were synthesized as potential penicillin analogs, but they failed to inhibit the growth of bacteria when tested in vitro against a range of gram-pos. and gram-neg. microorganisms.

IT 35359-55-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 35359-55-8 HCAPLUS

CN 1-Azetidineacetic acid, 3,3-diethyl-2,4-dioxo- (9CI) (CA INDEX NAME)



=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	23.54	781.21

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL

	ENTRY	SESSION
CA SUBSCRIBER PRICE	-1.56	-7.80

FILE 'REGISTRY' ENTERED AT 14:46:07 ON 18 MAY 2007
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STRUCTURE FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9
DICTIONARY FILE UPDATES: 17 MAY 2007 HIGHEST RN 935249-87-9

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TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\10519835h.str

chain nodes :
5 6 7 8 9 10
ring nodes :
1 2 3 4
chain bonds :
1-6 3-5 4-7 7-8 8-9 8-10
ring bonds :
1-2 1-4 2-3 3-4
exact/norm bonds :
1-2 1-4 1-6 2-3 3-4 3-5 4-7 7-8 8-9 8-10
isolated ring systems :
containing 1 :

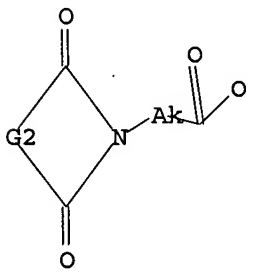
G1:H,M

G2:A,Cb,Cy,Hy,Ak,Ph

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS

L16 STRUCTURE UPLOADED

=> d l16
L16 HAS NO ANSWERS
L16 STR



G1 H,M

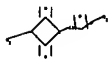
G2 A,Cb,Cy,Hy,Ak,Ph

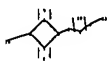
Structure attributes must be viewed using STN Express query preparation.

=> s l16
GENERIC GROUP NOT VALID HERE
Generic groups may not be used in these circumstances:

1. Any generic group node (e.g., Hy) in a ring.
2. An Ak node attached to another Ak node.

=>
Uploading C:\Program Files\Stnexp\Queries\10519835i.str





chain nodes :
5 6 7 8 9 10 13 15
ring nodes :
1 2 3 4
chain bonds :
1-6 2-15 3-5 4-7 7-8 8-9 8-10 9-13
ring bonds :
1-2 1-4 2-3 3-4
exact/norm bonds :
1-2 1-4 1-6 2-3 2-15 3-4 3-5 4-7 7-8 8-9 8-10 9-13
isolated ring systems :
containing 1 :

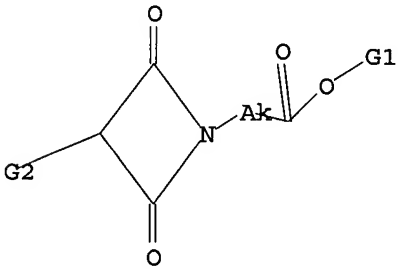
G1:H,M

G2:Cb,Cy,Hy,Ak,Ph

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 13:CLASS 15:CLASS

L17 STRUCTURE UPLOADED

=> d l17
L17 HAS NO ANSWERS
L17 STR



G1 H,M
G2 Cb,Cy,Hy,Ak,Ph

Structure attributes must be viewed using STN Express query preparation.

=> s l17
SAMPLE SEARCH INITIATED 14:49:23 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 350 TO ITERATE

100.0% PROCESSED 350 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 5878 TO 8122

```
PROJECTED ANSWERS:                0 TO        0

L18            0 SEA SSS SAM L17

=> s l17 sss full
FULL SEARCH INITIATED 14:49:30 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      6618 TO ITERATE

100.0% PROCESSED      6618 ITERATIONS                                1 ANSWERS
SEARCH TIME: 00.00.01

L19            1 SEA SSS FUL L17

=> FIL HCAPLUS
COST IN U.S. DOLLARS                                  SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                     174.35     955.56

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)            SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                       0.00      -7.80

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FILE COVERS 1907 - 18 May 2007  VOL 146 ISS 22
FILE LAST UPDATED: 15 May 2007  (20070515/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate

=> s l19
L20            1 L19

=> d l20 ibib abs hitstr tot

L20  ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         1972:112987  HCAPLUS
DOCUMENT NUMBER:          76:112987
TITLE:                    Synthesis of malonimide derivatives as potential
                          penicillin analogs
AUTHOR(S):                Golik, Uri
CORPORATE SOURCE:         Dep. Chem., Weizmann Inst. Sci., Rehovot, Israel
SOURCE:                   Journal of Heterocyclic Chemistry (1972), 9(1), 21-4
                          CODEN: JHTCAD; ISSN: 0022-152X
DOCUMENT TYPE:            Journal
```
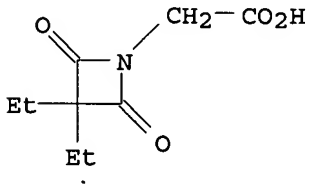

LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Malonimidoacetic acid derivs. (I, II) were synthesized as potential penicillin analogs, but they failed to inhibit the growth of bacteria when tested in vitro against a range of gram-pos. and gram-neg. microorganisms.
IT 35359-55-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 35359-55-8 HCAPLUS
CN 1-Azetidineacetic acid, 3,3-diethyl-2,4-dioxo- (9CI) (CA INDEX NAME)




```
=> s imidoalkan
             0 IMIDOALKAN
L21          0 IMIDOALKAN

=> s imidoalkanper
             0 IMIDOALKANPER
L22          0 IMIDOALKANPER

=> s imidocarboxylic acids
            22 IMIDOCARBOXYLIC
       1574229 ACIDS
L23          6 IMIDOCARBOXYLIC ACIDS
               (IMIDOCARBOXYLIC(W)ACIDS)

=> s l23 and crystalline
         77976 CRYSTALLINE
           249 CRYSTALLINES
         78204 CRYSTALLINE
               (CRYSTALLINE OR CRYSTALLINES)
        356565 CRYST
          1801 CRYSTS
        357833 CRYST
               (CRYST OR CRYSTS)
        383187 CRYSTALLINE
               (CRYSTALLINE OR CRYST)
L24          0 L23 AND CRYSTALLINE

=> s l23 and alkanper
             0 ALKANPER
L25          0 L23 AND ALKANPER

=> s l23 and alkan
           466 ALKAN
             4 ALKANS
           470 ALKAN
               (ALKAN OR ALKANS)
L26          0 L23 AND ALKAN
```

```
=> s percarboxylic acids
           278 PERCARBOXYLIC
       1574229 ACIDS
L27         155 PERCARBOXYLIC ACIDS
                (PERCARBOXYLIC(W)ACIDS)

=> s l27 and imidoalkan
             0 IMIDOALKAN
L28          0 L27 AND IMIDOALKAN

=> s l27 and imido
          5172 IMIDO
            14 IMIDOS
          5173 IMIDO
                (IMIDO OR IMIDOS)
L29          2 L27 AND IMIDO

=> s l27 and crystalline
         77976 CRYSTALLINE
           249 CRYSTALLINES
         78204 CRYSTALLINE
                (CRYSTALLINE OR CRYSTALLINES)
        356565 CRYST
          1801 CRYSTS
        357833 CRYST
                (CRYST OR CRYSTS)
        383187 CRYSTALLINE
                (CRYSTALLINE OR CRYST)
L30          0 L27 AND CRYSTALLINE

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     (FILE 'HOME' ENTERED AT 14:33:37 ON 18 MAY 2007)

     FILE 'REGISTRY' ENTERED AT 14:33:53 ON 18 MAY 2007
L1                STRUCTURE UPLOADED
L2             0 S L1
L3             0 S L1 SSS FULL
L4                STRUCTURE UPLOADED
L5             1 S L4
L6             2 S L4 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 14:36:14 ON 18 MAY 2007
L7             1 S L6

     FILE 'REGISTRY' ENTERED AT 14:38:51 ON 18 MAY 2007
L8                STRUCTURE UPLOADED
L9             0 S L8
L10           11 S L8 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 14:39:18 ON 18 MAY 2007
L11            7 S L10

     FILE 'REGISTRY' ENTERED AT 14:42:37 ON 18 MAY 2007
L12               STRUCTURE UPLOADED
L13            0 S L12
L14            2 S L12 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 14:43:07 ON 18 MAY 2007
L15            2 S L14
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     FILE 'REGISTRY' ENTERED AT 14:46:07 ON 18 MAY 2007
L16             STRUCTURE UPLOADED
L17             STRUCTURE UPLOADED
L18           0 S L17
L19           1 S L17 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 14:49:36 ON 18 MAY 2007
L20           1 S L19
L21           0 S IMIDOALKAN
L22           0 S IMIDOALKANPER
L23           6 S IMIDOCARBOXYLIC ACIDS
L24           0 S L23 AND CRYSTALLINE
L25           0 S L23 AND ALKANPER
L26           0 S L23 AND ALKAN
L27         155 S PERCARBOXYLIC ACIDS
L28           0 S L27 AND IMIDOALKAN
L29           2 S L27 AND IMIDO
L30           0 S L27 AND CRYSTALLINE

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L29  ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         1991:583094  HCAPLUS
DOCUMENT NUMBER:          115:183094
TITLE:                    Continuous preparation of imido
                          percarboxylic acids
INVENTOR(S):              Fuchs, Hermann; Gethoeffer, Hanspeter; Gilb, Walter
PATENT ASSIGNEE(S):       Hoechst A.-G., Germany
SOURCE:                   Ger. Offen., 4 pp.
                          CODEN: GWXXBX
DOCUMENT TYPE:            Patent
LANGUAGE:                 German
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
     --------------       ----   --------    --------------------     --------
     DE 4003309            A1    19910808    DE 1990-4003309          19900205
     EP 441235             A2    19910814    EP 1991-101176           19910130
     EP 441235             A3    19920226
         R:  BE, CH, DE, FR, GB, IT, LI, NL
     US 5132431            A     19920721    US 1991-649619           19910201
     CA 2035601            A1    19910806    CA 1991-2035601          19910204
     JP 04211057           A     19920803    JP 1991-13473            19910204
PRIORITY APPLN. INFO.:                       DE 1990-4003309     A    19900205
OTHER SOURCE(S):          MARPAT 115:183094
GI
```

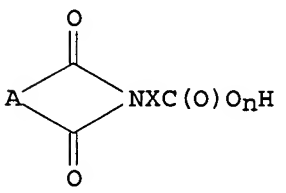

I

AB Title compds. I [n = 2; A = alkylene, alkenylene, phenylene, naphthylene; X = C1-19 alkylene, phenylene] were prepared continuously by oxidizing I (n = 1) in H2SO4 or MeSO3H with organic H2O2 in a static mixer. Thus, ε-phthalimidocaproic acid in H2SO4 was treated with 50% aqueous H2O2 to give 91% peracid.

L29 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:76941 HCAPLUS
DOCUMENT NUMBER: 112:76941
TITLE: Novel imido aromatic percarboxylic acids and their preparation and use as bleaching agents
INVENTOR(S): Venturello, Carlo; Cavallotti, Caludio
PATENT ASSIGNEE(S): Ausimont S.p.A., Italy
SOURCE: Eur. Pat. Appl., 8 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 325288	A1	19890726	EP 1989-101002	19890120
EP 325288	B1	19930901		
R: AT, BE, CH, DE, ES, FR, GB, LI, NL, SE				
US 5575947	A	19961119	US 1989-299017	19890119
AU 8928679	A	19890720	AU 1989-28679	19890120
AU 620067	B2	19920213		
JP 02196771	A	19900803	JP 1989-11743	19890120
JP 2786223	B2	19980813		
AT 93849	T	19930915	AT 1989-101002	19890120
ES 2058347	T3	19941101	ES 1989-101002	19890120
CA 1340679	C	19990727	CA 1989-588844	19890120
BR 8900264	A	19890919	BR 1989-264	19890123
PRIORITY APPLN. INFO.:			IT 1988-19132 A	19880120
			EP 1989-101002 A	19890120

OTHER SOURCE(S): MARPAT 112:76941
GI For diagram(s), see printed CA Issue.
AB Title per acids I [A = (un)substituted benzene or naphthalene nucleus; R = H, CO2H, C(O)OOH, (un)substituted alkyl; n = 1-5] are prepared as bleaching agents. Thus, 44 g 70% H2O2 was added gradually to 55 g phthalimidoacetic acid in 330 g MeSO3H at < 15°, and after 1.5 h the mixture was poured into 20% (NH4)2SO4 at 5°. Filtration, neutralization to pH 6 by Na2CO3 in aqueous Na2SO4, refiltration, aqueous washing, and drying in vacuo at room temperature gave 58 g (97%) of substantially pure phthalimidoperacetic acid
(II). In a bleaching test at 200 mg/L initial active O, 1.46 g II gave 83.6% bleaching of standard stained cotton, vs. only 75.1% by 1.86 g H-48 (Mg monoperphthalate).

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	39.53	995.09
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.34	-10.14

STN INTERNATIONAL LOGOFF AT 14:55:55 ON 18 MAY 2007